

## CLAIMS

1. An image processing apparatus comprising:
  - an image memory to store a plurality of image data read in parallel;
  - an image read unit to read out the plurality of image data from the image memory in block units of a predetermined size; and
  - an image compression unit to carry out compression processing on the plurality of image data read out by the image read unit,
    - wherein the image read unit reads out the plurality of image data read in parallel by repeatedly reading a predetermined number of predetermined blocks for each of the plurality of image data and switching the plurality of image data according to a designated order after the reading, and
    - wherein the image compression unit inserts an identifier after the final block of the predetermined number of blocks after image compression the predetermined number of blocks for each of the plurality of image data by image compression in block units the plurality of image data read out by the image read unit.
2. An image processing apparatus according to claim 1,
  - wherein the image read unit reads out each of the plurality of image data prior to storing all of the data for each of the plurality of image data in the image memory, and
  - wherein the image compression unit performs image compression in the block units on the plurality of image data read out from the image read unit.
3. An image processing apparatus according to claim 1, wherein the predetermined number can be changed, and the designation of the order of switching of the plurality of image data can be changed.
4. An image processing apparatus according to claim 1, wherein the image compression is JPEG compression, and the identifier is a restart marker.

5. An image processing apparatus according to claim 1, wherein each of the plurality of image data is one page of image data, and the predetermined number is a number corresponding to the width in the main scanning direction of each page for the plurality of image data.

6. An image processing apparatus comprising:

an image processing control unit to receive an image file storing image-compressed image data; and

an image expansion unit to expand the image-compressed image data,  
wherein the image-compressed image data comprises a plurality of image data read in parallel, and each of the plurality of image data includes predetermined numbers of blocks of a predetermined size which are image-compressed in units of the blocks and an identifier inserted after the last block of the predetermined numbers of blocks, and the plurality of image data is arranged so as to switch over between the plurality of image data according to a designated order,  
wherein the image processing control unit separates the image-compressed image data each of the plurality of image data according to the identifiers included in the image-compressed image data and sends the separated plurality of image data to the image expansion unit, and  
wherein the image expansion unit expands each of the separated plurality of image data in units of the blocks.

7. An image processing method comprising:

storing a plurality of image data read in parallel;

reading out the plurality of image data read in parallel by repeatedly reading a predetermined number of predetermined blocks for each of the plurality of image data and switching the plurality of image data according to a designated order after the reading;  
inserting an identifier after the final block of the predetermined number of blocks

after image compression the predetermined number of blocks for each of the plurality of image data by image compression in block units the plurality of image data read out; receiving an image file storing the image-compressed image data; separating the image-compressed image data each of the plurality of image data according to the identifiers included in the image-compressed image data; and expanding each of the separated plurality of data in units of the blocks.